

REPLACEMENT CLAIMS

Please substitute the following corrected replacement version of claim 14 for pending claim 14.

14. A method for detecting Gold code phase and carrier frequency in a GPS signal comprising the steps of:

collecting a multiple millisecond portion of a composite GPS signal in a GPS receiver;
storing the portion of the composite GPS signal in a memory in the GPS receiver;
partitioning the collected composite into one millisecond segments;
converting each one millisecond segment to the frequency domain;
multiplying each of the converted millisecond segments by a frequency representation of a Gold code corresponding to a GPS satellite in view of the receiver to generate a product;
converting each product to the time domain to obtain a correlation signal between each millisecond segment and the Gold code;
determining a location of a peak in each of the one millisecond segments corresponding to a Gold code phase using the correlation signals; and
determining a carrier frequency using the located peaks.
